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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/726,182

12/02/2003

Brian W. Brandner

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EXAMINER

BRADEN, SHAWN M

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/726,182	Applicant(s) BRANDNER ET AL.	
	Examiner SHAWN M. BRADEN	Art Unit 3781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-12 and 22-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-12 and 22-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/10/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/10/2008 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 23-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Potter (2002/0063129).

4. With respect to claim 23, Potter shows a shell (10) of a first polymeric material (50) defining an interior for holding fuel and having an opening for receiving fuel into the interior and a vapor barrier layer (51) of a second polymeric material different than the first polymeric material , a separate fill nipple (42) having an outer surface and an inner surface defining a passage extending between a pair of generally opposed ends of the fill nipple with one open end at least partially overlapped with and attached to the shell with the passage aligned with the opening through the shell for allowing fuel to flow

though the passage and into the shell , the fill nipple has an inner layer of a polymeric material (48 inner layer clearly shown in fig. 7) forming the inner surface of the fill nipple, an outer layer of polymeric material (outer layer of 48 clearly shown in fig. 7 see also fig. 1 for further clarification of layers) forming the outer surface of the fill nipple, and **a vapor barrier layer (51 fig. 7)** between the inner and outer layers and of a polymeric material different than the polymeric material of the inner and outer layers of the fill nipple, wherein the vapor barrier layer overlies the shell vapor barrier layer along the entire extent of the overlap of the fill nipple and shell providing at least two vapor barrier layers along the entire extent of the overlap of the fill nipple (fig 6) and shell and the first polymeric material of the shell and an adjacent layer of the fill nipple are of the same polymeric material and are welded together circumferentially continuously around the opening of the shell.

5. With respect to claim 24, Potter shows the end of the fill nipple not attached to the shell is constructed and arranged to carry at least a portion of two separate fuel system components (figs. 1-3).

6. With respect to claim 25, Potter shows one end includes a radially inwardly extending flange (top flange in fig. 6) and said another end includes a radially outwardly extending flange (bottom flange in fig. 6).

7. With respect to claim 26, Potter shows a shell (10) defining an interior for holding fuel and having an opening for receiving fuel into the interior , a separate fill nipple (42) having an outer surface and an inner surface defining a passage extending between a pair of generally opposed open ends (top and bottom) of the fill nipple with one end

circumferentially continuously attached to the shell with the passage aligned with the opening for allowing fuel to flow through the passage and into the interior of the shell the fill nipple has an inner layer of material (inner 48 fig. 7 see also fig. 1) forming the inner surface of the fill nipple, an outer layer of material forming the outer surface (outer 48 fig. 7) of the fill nipple, a vapor barrier layer (51 fig. 7) of a polymeric material between the inner and outer layers, and a pair of adhesive layers (see fig. 1 that shows how the layered material on a more expanded view) (examiner also notes fig. 1 shows how typical fuel tank material is laid out) with one adhesive layer disposed between the outer layer and the vapor barrier layer and the other adhesive layer disposed between the inner layer and the vapor barrier layer; and a separate cover (the unmarked layer in fig. 7) (also shown in fig. 6 as element 22) connected to the shell and the fill nipple and spanning the area of attachment of the fill nipple to the shell.

8. With respect to claim 27, Potter shows a shell (10) defining an interior for holding fuel and having an opening (16) for receiving fuel into the interior and a vapor barrier layer (51 next to element 50) of a polymeric material, a separate fill nipple (42) having an outer surface and an inner surface defining a passage extending between a pair of generally opposed open ends (fig. 6) of the fill nipple with one end at least partially overlapped (clearly shown in fig. 6) with and attached to the shell with the passage aligned with the opening allowing fuel to flow through the passage and into the interior of the shell, the fill nipple has an inner layer of material forming the inner surface of the fill nipple, an outer layer of material forming the outer surface of the fill nipple, and a vapor barrier layer (51) of a polymeric material between the inner and outer layers, wherein

the vapor barrier layer overlies the fuel tank vapor barrier layer along the entire extent of the overlap of the fill nipple and shell providing two vapor barrier layers along the entire extent of the overlap of the fill nipple and shell (clearly shown in fig. 6).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 9-12 and 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Schaftingen (USPN 6,843,267) in view of Gerard (US PUB No. 2005/0067415).

11. Van Schaftingen discloses the invention substantially as claimed. With respect to claim 9, Van Schaftingen shows a shell including a vapor barrier layer (fig. 1 or 3) defining an interior for holding fuel and having an opening (fig. 3) for receiving fuel into the interior of the shell, the shell having at least an outer layer of a polymeric material (fig. 1 shows the multilayer tank with the stack of the normal HDPE with vapor barrier of EVOH in between) and a vapor barrier layer (EVOH see col 6 line 43) of a polymeric material different than the polymeric material of the outer layer (HDPE) a separate fill nipple (10 in fig. 3) having an outer surface and an inner surface (the materials are defined col 6 line 43 the PEHP,EVOH,PEHP material) defining a passage extending between a pair of generally opposed open ends of the fill nipple with one open end attached to the shell with the passage aligned with the opening in the shell for

allowing fuel to flow through the passage and into the shell, the fill nipple has an inner layer of a polymeric material forming the inner surface of the fill nipple, an outer layer of polymeric material forming the outer surface of the fill nipple, a vapor barrier layer (EVOH) of a polymeric material different than the polymeric material of the inner and outer layers and disposed between the inner and outer layers, and a pair of adhesive layers (maleic anhydride) with one adhesive layer (inherent with this type of gas tank material) disposed between the outer layer and the vapor barrier layer (EVOH) and the other adhesive layer disposed between the inner layer and the vapor barrier layers, the vapor barrier layer being separate and spaced from the vapor barrier layer of the shell (fig. 3) at least one layer of the shell and the fill nipple welded (between 6,7 fig 1) together circumferentially continuously around the opening. With respect to claim 22, the shell includes an outer layer and an inner layer, and the inner layer of the fill nipple is attached to the outer layer of the shell and the cover is attached to the outer layer of the fill nipple and the outer layer of the shell (clearly shown in fig. 3). However Van Schaftingen does not disclose a separate cover with an inner layer of a polymeric material welded to the shell and the fill nipple and spanning the area of attachment of the fill nipple to the shell and with a vapor barrier layer of a polymeric material different than the polymeric material of the inner layer of the cover.

Gerard teaches a separate cover (109) with an inner layer of a polymeric material welded (11) to the shell and the fill nipple and spanning the area of attachment of the fill nipple to the shell and with a vapor barrier layer of a polymeric material different than the polymeric material of the inner layer of the cover (109 material break down

paragraph 54) in the same field of endeavor for the purpose of further protecting against vapor release.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to add another separate cover to the tank of Van Schaftingen as taught by Gerard in order to protect against vapor loss.

12. With respect to claim 11, Gerrard as applied above further shows an embodiment where one end is defined in part by a radially outwardly extending flange (fig. 1) that presents at least a portion of the inner surface for attachment to the shell and the cover (9) is attached to said flange (see also paragraph 17 for definition of Gerrard's accessory).

13. With respect to claim 12, Gerrard as applied above further shows a plastic weld joint (fig. 1 of both) attaches the flange to the shell and the cover overlies the weld joint.

Response to Arguments

14. Applicant's arguments filed 02/11/2008 have been fully considered but they are not persuasive. In response to applicants argument "Independent claim 23, on the other hand, recites a fill nipple that is separate from the shell and includes a vapor barrier layer between inner and outer layers of the fill nipple. The vapor barrier layer of the separate fill nipple overlies the vapor barrier layer of the shell along the entire extent of the overlap of the fill nipple and shell providing at least two vapor barrier layers along the entire extent of the overlap of the fill nipple and shell. As noted above, Potter merely discloses sandwiching a portion of a container between inner and outer fitting components 20, 40, so that the vapor barrier layer of the container itself is sandwiched

Art Unit: 3781

between these components". Examiner draws attention to fig. 6 where flange portion 22 clearly overlaps all three tank layers (50,51,50), this alone is combined with tank layer (51) and meets the recitation "at least two barrier layers". But examiner further states that flange (22) also has a barrier layer as shown in (fig. 7), that being three barrier layers (51 of the tank, 51 of the nipple and the outer layers of flange 22) all being vapor barriers at the overlap.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHAWN M. BRADEN whose telephone number is (571)272-8026. The examiner can normally be reached on Mon-Friday 9-6:30 est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on (571)272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3781

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. M. B./
Examiner, Art Unit 3781

/Anthony D Stashick/
Anthony Stashick
Supervisory Patent Examiner, Art Unit 3781